Title (en)

SILICON-OXYGEN MATERIAL, NEGATIVE ELECTRODE MATERIAL AND PREPARATION METHOD THEREFOR, AND LITHIUM ION BATTERY

Title (de)

SILIZIUM-SAUERSTOFF-MATERIAL, NEGATIVELEKTRODENMATERIAL UND HERSTELLUNGSVERFAHREN DAFÜR SOWIE LITHIUM-IONEN-BATTERIE

Title (fr)

MATÉRIAU SILICIUM-OXYGÈNE, MATÉRIAU D'ÉLECTRODE NÉGATIVE ET SON PROCÉDÉ DE PRÉPARATION, ET BATTERIE AU LITHIUM-ION

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Application

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Abstract (en)

The present application provides a silicon oxygen material, a negative electrode material, and its preparation method, and a lithium ion battery. The silicon oxygen material includes a silicon oxide having a chemical formula SiO_x, where 0<x<2, wherein the silicon oxygen material is primary particles having a Wadell sphericity greater than 0.92. The negative electrode material provided by the present disclosure includes the silicon oxide having a high sphericity, the silicon oxide has a more stable structure during a cycling process, so that it is capable of avoiding the problem of cracking of particles of the material due to repeated generation of the SEI film, thereby improving cycling performance of the material and reducing the volume expansion due to SEI film generation.

IPC 8 full level

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